Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Currently Amended) A method for generating an electronic signal, comprising:

determining an update phase-angle associated with the electronic signal;

computing a first value of a cyclic function based on an interpolation using a first set of data-values that generally describe the function and have a spacing expressed in terms of cycles, the update phase-angle and a second set of pre-calculated-values, wherein the pre-calculated values are based on spacing differences between the data-values; and

updating the electronic signal based on the first value.

2. (Original) The method of claim 1, wherein the step of interpolating is based on a Lagrange technique.

3. (Original) The method of claim 1, further wherein the data-values are equally-spaced.

4. (Original) The method of claim 3, wherein the pre-calculated values are substantially the same value.

5. (Canceled)

6. (Currently Amended) The method of claim [5] 1, wherein the function is a sinusoid.

7. (Original) The method of claim 6, wherein the data-values are derived from a table of data-values representing less than a cycle of the sinusoid.

8. (Original) The method of claim 1, wherein the electronic signal is an analog signal having sinusoidal form.

9. (Original) The method of claim 1, further comprising producing a communication signal having embedded information based on the electronic signal.

10. (Currently Amended) An apparatus for generating an electronic signal, comprising:

a memory that contains an update phase-angle associated with the electronic signal, a first table of data-values that generally describe a cyclic function and have a spacing expressed in terms of cycles, and a second table of pre-calculated-values, wherein the pre-calculated values are based on spacing differences between the data-values;

one or more devices that compute a first value of the function based on an interpolation using the update phase-angle, the first set of data-values from the first table and the second set of pre-calculated-values from the second table; and

an interface that updates the electronic signal based on the first value.

11. (Original) The apparatus of claim 10, wherein the one or more devices use a Lagrange interpolation technique.

12. (Original) The apparatus of claim 11, wherein the data-values are equally-spaced.

13. (Original) The apparatus of claim 12, wherein the pre-calculated values are substantially the same value.

14. (Canceled)

15. (Original) The apparatus of claim 10, wherein the electronic signal is an electronic analog signal having sinusoidal form.

16. (Original) The apparatus of claim 10, wherein the electronic signal is used to produce a communication signal having embedded information.

17. (Currently Amended) A machine-readable medium including instructions for generating an electronic signal, the instructions being arranged to cause a machine to perform the steps of:

determining an update phase-angle associated with the electronic signal;

computing a first value of a cyclic function based on an interpolation using a first set of data-values that generally describe the function and have a spacing expressed in terms of cycles, the update phase-angle and a second set of pre-calculated-values, wherein the pre-calculated values are based on spacing differences between the data-values; and

updating the electronic signal based on the first value.

18. (Original) The machine-readable medium of claim 17, wherein the step of interpolating is based on a Lagrange technique.

19. (Original) The machine-readable medium of claim 18, wherein the data-values are equally-spaced.

20. (Currently Amended) An apparatus for generating an electronic signal, comprising:

a determining means that determines an update phase-angle associated with the electronic signal;

a computing means that computes a first value of a cyclic function based on the update phase-angle, an interpolation using a first set of data-

values that generally describe the cyclic function and have a spacing expressed in terms of cycles, and a second table and a second set of pre-calculated-values, wherein the pre-calculated values are based on spacing differences between the data-values; and

a generating means that generates the electronic signal based on the first value.

21. (Original) The apparatus of claim 20, wherein the computing means uses a Lagrange interpolation technique.

22. (Original) The apparatus of claim 21, wherein the data-values are equally-spaced.